Context

We're working on a low-code AI-agent platform. A big feature is "Conversation Insights" an analytics dashboard that surfaces key metrics from transcribed call data.

Part 1 (Design: 1-2 h)

You're given a JSON schema for a single conversation record.

```
interface Conversation {
  id: string;            // ID of conversation
  agent: string;            // ID of the AI agent
  startTime: number;       // timestamp (ms since epoch)
  duration: number;         // call duration (seconds)
  cost: number;             // cost of the call (USD)
  status: 'busy'|'success'|'transfer'|'no_answer'|'dropped';
  callInfo: {
    caller: string;        // from number
    callee: string;         // to number
    type: 'inbound'|'outbound';
    stats?: {
      llmLatency: number;      // ms
      ttsLatency: number;      // ms
      interruptions: number;   // count
    };
  };
}
```

1. Propose your top 7 metrics (derived from fields above) that would give valuable insights to an end-user. (Here end user is an employee overseeing AI calling for a business)
2. Propose your filters that allow end-users to slice the data.
3. List down briefly how you'd visualize each of the metrics x filters (chart type, table, KPI card, etc).
4. Any other ideas to make the insights more accessible and actionable. (Keep your responses concise)

Part 2 (Implementation: 4-5 h)

Build a minimal prototype using Next.js + TypeScript and MobX State Tree that:

1. Create /data/conversations.json with the given mock array of conversation objects. (Optional: Create an endpoint on the Next.js server that serves this mock data, so the client retrieves it from the server instead of using it directly on the client side.)

2. MST Store
   - Define a conversation model matching the schema.
   - Create a root store that:
     - Loads the conversations snapshot.
     - Provides actions to apply your filters.
     - Exposes views for each of your 7 metrics.

3. UI (/insights page)
   - Render controls for your chosen filters and time windows.
   - Display metric values (as KPI cards, tables or simple charts) for as many of your 7 metrics as you can complete in the given timeframe.

Tech requirements:

- Next.js (latest) + TypeScript
- MobX State Tree for all state/logic
- Any component library and minimal styling (Tailwind, CSS modules, etc.)

Deliverables:

- GitHub repo with your code
- README (setup + run instructions)
- design.md with your Part 1 metrics/design
- [Optional] Short notes on any trade-offs or extras you'd add with more time.

CRITICAL: It is perfectly fine if you are not able to do everything but be honest and only execute things you can within 6 hours of active work (part 1 + 2).

The submission deadline is 11:59 PM on Wednesday 30th April, you can use the remaining time to learn and explore topics like MobX State Tree (MST), TypeScript, Next.js, or anything else that helps you improve your solution.